

SkyRise®

OTIS



Dubai's Burj Khalifa, the world's tallest structure at 830 meters, combines cutting-edge building technologies with historic references to Islamic architecture. The owners asked Otis to provide the elevators for this iconic building. In 2015, the two double-deck elevators used to reach the observation deck on the 124th floor achieved something like a lunar landing, having traveled a total of 384,400 kilometers since the building's opening in 2010 – equal to the distance between the Earth and the moon. Each day, the double-deck elevators travel 244.4 kilometers – at speeds of 10 meters per second, or more than 20 miles an hour.

Your building will inspire generations to come.
Our mission is to bring your vision to life.



“

We wanted a beautiful monument for our capital city. Otis helped us achieve our vision.

”

The Lotte Group

The Lotte World Tower rises 555 meters above the city of Seoul — its sleek, tapered look inspired by traditional Korean art forms. Inside this landmark building, Otis SkyRise® double-deck elevators take just 60 seconds to bring passengers to the observation deck on Floor 121. To make that possible, we built the world's tallest double-deck hoistways. Other innovations include seismic sensors to monitor the elevators designed to evacuate the building during emergencies.

Lotte World Tower

Seoul, South Korea

Asia's Second Tallest Building | 2016

60 seconds
to observation deck

555 meters
in height

10 million
passenger trips/year

Free your imagination

A tall, iconic building can energize a city and inspire people for generations. Creating one requires a leap of the imagination — and a partner to help bring your ideas to life.

A partner like Otis.

The industry leader for more than 160 years, we're one of the world's most trusted brands, with a record of innovation second to none. And with SkyRise, our premier high-rise elevator system, we have taken everything we know and pushed it even further to deliver the benefits your project demands.

Wherever your imagination takes you, SkyRise will get you there.

Flexible solutions to realize your vision

A refined passenger experience

Innovative elevator technologies

Unique capabilities that streamline construction

A dedicated global major projects team

Support you can count on through a lifetime of service





Design without limits

Every high-rise project brings unique challenges. We help you anticipate them and develop solutions grounded in cutting-edge science and precision engineering.

We conduct advanced simulation and analysis to understand site-specific variables such as building sway and stack effect, ensuring your SkyRise system delivers peak performance. And we can integrate access control, security and fire safety technologies into the system by leveraging products and expertise from our sister United Technologies companies, including Carrier, Chubb, Kidde and Lenel.

We also partner with the United Technologies Research Center, one of the world's premier research organizations. By working together in areas ranging from materials science to acoustics, we ensure that our products remain the safest, most reliable and most exciting in the industry.

“

We're passionate about finding the right solution for each and every challenge our customers bring us.

Philippe Delpech
President, Otis Elevator

”



Step into perfection

To experience a SkyRise elevator is to experience your building at its best: a quick, easy, relaxed transition from a welcoming lobby to a destination at the top of the world.

Design is central to the passenger experience. SkyRise gives you the freedom to craft superb, stylish interiors that honor your passengers, support your vision and reinforce the character of the building itself.

Perfection goes beyond aesthetics. It also includes technologies that make the entire experience of the building more enjoyable.

Our CompassPlus® dispatching technology gets people where they are going up to 50 percent faster than conventional dispatching systems. Our eCall™ smartphone app summons their elevator from their office or apartment. And with OptiSense™ traffic management, they'll find elevators waiting for them at the floors where they are needed most. And they'll enjoy the experience of the ride itself: quiet, comfortable, secure and smooth.





Innovative technologies working together

Each SkyRise installation integrates best-in-class technologies to ensure the seamless, safe operation of the entire system. Its sustainable design minimizes space requirements and reduces energy use.

SkyMotion machines

Our SkyMotion® machines are among the most energy efficient on the planet. Their lighter weight makes them easier to install, and their smaller footprint saves space.

E2 intelligent control system

Our state-of-the-art controller is built with the fly-by-wire style technology used in aircraft, providing unmatched reliability in a compact design. The controller employs adaptive motion profiling to reduce energy consumption while our patented SNAP algorithm ensures a smooth ride.

ReGen drive

As pioneers in the use of regenerative drives, we continue to advance this technology with the development of multilevel switching designs that are quieter, smaller and even more efficient. Energy efficiency is important to our customers — so the ReGen™ drive is standard on all SkyRise systems.

Q-frame cab technology

We love elevators, especially quiet, smooth ones. So we designed our noise-blocking Q-frame cab and aerodynamic shroud using computation fluid dynamic simulations and wind tunnel tests. Trust us. The science works.

Safety brakes

We have families too. So all our products meet the highest standards. It's also why we make the safety brakes for the highest speed SkyRise elevators from the same materials that were used by United Technologies to make rocket engine nozzles.



A faster, more intelligent way to build

We know what it takes to put up a high-rise building — we've got years of construction experience ourselves. That's why we created the SkyBuild™ internal construction elevator, to speed construction and save you money. With the SkyBuild elevator, crews and materials get where they need to be quickly and safely — without a crane, without an external lift and without exposure to the weather. SkyBuild's unique hydraulic piston system enables it to climb one floor at a time as your building rises. Each climb can be accomplished between shifts, reducing the impact on other trades. And once construction is complete, SkyBuild goes directly into service as a SkyRise elevator.

SkyBuild offers substantial benefits at every stage of construction

Climbs in one-floor increments to keep pace with construction

Uses our exclusive hydraulic-piston system, eliminating the need for a crane

Jumps during off-hours so other trades can keep working

Enables crews to close off building façade as each floor is added

Quickly converts into a permanent SkyRise elevator upon building's completion

“

SkyBuild was the smart solution for us. It shortened our schedule and reduced our costs. The Otis team brought tremendous knowledge to the job.

”

Philippe Rouchette

Project Director, Tour Granite, Paris
VINCI Construction, France



Shaped by the intersection of two sweeping arcs and a square prism, the Shanghai World Financial Center speaks eloquently of the city's emergence as a global capital. Its striking design presented a special engineering challenge known as stack effect. This is created as wind flows through the building's lobby and up the elevator shafts, causing noise, vibration and the potential malfunctioning of elevator doors. Using advanced computer modeling, our engineers worked closely with the customer to analyze the problem and identify the best solution: creating vestibules to enter the building – and keep out the wind.

Mega-projects deserve a mega-team

Every SkyRise project has the support of our global projects organization. This organization supports our local and regional offices in more than 200 countries and territories. From start to finish, our dedicated experts collaborate with your team to keep things on track. Standing with them are nearly 2,000 Otis R&D engineers ready to solve any imaginable challenge.



Shanghai World Financial Center

Opened 2008

101
floors

494 meters
height to tip

474 meters
height to observatory

We keep your world moving

The completion of your SkyRise installation is only the beginning of years of safe, reliable performance. We offer customized on-site service solutions to suit the unique needs of your building.

At the same time, advanced digital diagnostic tools enable our engineers to monitor your equipment remotely to prevent or resolve problems that may arise. And our eService portal provides you with continuous real-time performance, maintenance and other critical account information.



Imagine. Build. Inspire.

For generations Otis has enabled architects and developers everywhere to imagine, design and build at the very top of the industry. As our premier high-speed, high-rise elevator system, SkyRise helps make your building a symbol of excellence for generations to come.

SkyRise offers a unique combination of industry-leading technologies, flexibility in design, speed in construction, superior passenger experience and global organizational support.

Ping'An Finance Center, Shenzhen, China



Canton Tower, Guangzhou, China



Petronas Towers, Kuala Lumpur, Malaysia



Empire State Building, New York City, USA



30 Hudson Yards, New York City, USA



Photo courtesy of Related/Oxford

Two International Finance Centre, Hong Kong



Wherever you find the world's most
iconic buildings, you'll find Otis.

Eighty years after installing the original equipment, Otis was selected to modernize the 68 elevators at the Empire State Building, which stood as the world's tallest building from its completion in 1931 until the topping out of the first World Trade Center tower in 1970. The new Otis SkyRise elevators transport 10 million office workers and building visitors each year – up to 40 percent faster thanks to new dispatching technology.



Otis Elevator Company is the world's leading manufacturer and maintainer of elevators, escalators and moving walkways.

Founded more than 160 years ago by the inventor of the safety elevator, Otis offers products and services through its companies in more than 200 countries and territories, and maintains approximately 2 million elevators and escalators worldwide. Every day, Otis moves more than 2 billion people through the world's urban landscapes.

Otis is a unit of United Technologies Corp. (UTC), a leader in the global building systems and aerospace industries. For more information, visit www.otis.com and follow us on Twitter @OtisElevatorCo.

